

Docket No.: 4492-0135PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Toshihiko SEIKE et al.

Application No.: 10/551,581

Confirmation No.: 4579

Filed: September 29, 2005

Art Unit: 3653

For: SHEET TRANSPORT MECHANISM

Examiner: T. A. Morrison

**REPLY IN RESPONSE TO FINAL OFFICE ACTION UNDER CFR 1.116**

MS AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

DO NOT ENTER: /T.M./

Sir:

**INTRODUCTORY COMMENTS**

In response to the Final Office Action dated January 8, 2009, please amend the above-identified U.S. patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 4 of this paper.

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### AMENDMENTS TO THE CLAIMS

1. (Currently amended) A sheet transport mechanism, comprising:  
a rotation roller;  
a plurality of driven rollers which are arranged parallel to an axis of the rotation roller;

and

a plurality of sheet transport guides, each guiding toward the rotation roller, a sheet to be transported between the rotation roller and the driven rollers, each of the sheet transport guides including a torsion coil spring having an arm portion which is connected to each of the driven rollers, wherein

wherein each of the sheet transport guides applies elastic force to each of the driven rollers so that each of the driven rollers is elastically biased toward the rotation roller, and each elastic force applied to each of the sheet transport guides is different from each other with distance from a predetermined reference position, and

the predetermined reference position is located at a position where a sheet S of any size necessarily passes.

2-11. (Canceled)

12. (Previously presented) A sheet transport mechanism according to claim 1, wherein the predetermined reference position is located in a central part of the shaft of the rotation roller.

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13. (Previously presented) A sheet transport mechanism according to claim 1,  
wherein the predetermined reference position is located in either one of opposite end  
portions of the shaft of the rotation roller.

14. (New) A sheet transport mechanism, comprising:

a rotation roller;

a plurality of driven rollers which are arranged parallel to an axis of the rotation roller;

and

a plurality of sheet transport guides, each guiding toward the rotation roller, a sheet to be transported between the rotation roller and the driven rollers, each of the sheet transport guides including a torsion coil spring having a coil portion fixed to a frame, where the coil portion has a first arm portion which extends to and is attached to a respective rotation shaft of one of the driven rollers and the coil portion has a second arm extending to and fixed to the frame, wherein each of the sheet transport guides applies elastic force to one of the driven rollers so that each of the driven rollers is elastically biased toward the rotation roller, and

each elastic force applied to each of the sheet transport guides is different from each other with distance from a predetermined reference position

15. (New) A sheet transport mechanism according to claim 14, wherein the predetermined reference position is located at a position where a sheet S of any size necessarily passes.

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### **REMARKS**

Reconsideration and allowance of the subject application are respectfully requested. Applicants thank the Examiner for total consideration given the present application. Claims 1 and 12-13 were pending prior to the Office Action. Claims 14-15 have been added through this reply. No claims have been canceled through this reply. Therefore, claims 1 and 12-15 are pending. Claims 1 and 14 are independent. Applicants respectfully request reconsideration of the rejected claims in light of the remarks presented herein, and earnestly seeks a timely allowance of all pending claims.

### **OFFICIAL ACTION**

#### **Claim Rejection – 35 U.S.C. § 112**

Claims 1 and 12-13 are rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as their invention. The Examiner indicates that the term “each” was intended to be “one”. Applicants believe that the term “each” is not indefinite.

Regarding claim 1, the Examiner states that the recitation of “each of the sheet transport guides including a torsion coil spring having an arm portion which is connected to **each** of the driven rollers” should recite something like “each of the sheet transport guides including a torsion coil spring having an arm portion which is connected to [[each]] one of the driven rollers.” (See Final Office Action dated January 8, 2009, page 2, section 1, paragraph 2 – emphasis added in original.)

Further, the Examiner states that the recitation of “wherein each of the sheet transport guides applies elastic force to **each** of the driven rollers so that each of the driven rollers is elastically biased toward the rotation roller” should recite something like “wherein each of the sheet transport guides applies elastic force to [[each]] one of the driven rollers so that each of the driven rollers is elastically biased toward the rotation roller.” (See Final Office Action dated January 8, 2009, page 2, section 1, paragraph 3 – emphasis added in original.)

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However, the Examiner's interpretation is incorrect because the recitation "each of the sheet transport guides including a torsion coil spring having an arm portion which is connected to each of the driven rollers" is clearly shown in Figure 2A. The Examiner is respectfully requested to review claim 1 in view of Figure 2A, where Figure 2A clearly illustrates that each of the sheet transport guides include a torsion coil spring having an arm portion which is connected to each of the driven rollers.

Therefore, Applicants maintain that claims 1 and 12-13 are *not* indefinite and the rejection to claims 1 and 12-13 should be withdrawn.

#### **Claim Rejection - 35 U.S.C. § 103(a)**

Claims 1 and 12-13 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over JP Publication No. 2001-130780 (hereinafter the "780" publication) in view of Nakano (U.S. Patent 5,540,423). Applicants respectfully traverse this rejection.

For a Section 103 rejection to be proper, a *prima facie* case of obviousness must be established. *See M.P.E.P. 2142*. One requirement to establish a *prima facie* case of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. *See M.P.E.P. 2142; M.P.E.P. 706.02(j)*. Thus, if the cited references fail to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

#### **Argument: Features of claim 1 not taught:**

Applicants have amended independent claim 1 merely to further clarify the claimed apparatus in order to move prosecution forward. Claim 1 is directed to a sheet transport mechanism which has a movable member (a driven roller R32 shown in Figure 1 or a separation pad 2 shown in Figure 3) and a sheet transport guide (a torsion coil spring) which applies elastic force to the movable member and forms a sheet transport path by an arm. Such a configuration prevents a gap in a sheet transport path and occurrence of jam.

Furthermore, according to claimed apparatus, each elastic force applied to each of the sheet transport guides is different from each other with distance from a predetermined reference position, as shown in Figures 2B and 2C. The predetermined reference position means the

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position where a sheet S of any size necessarily passes. (Support: lines 8-10 of page 10 in the specification).

In contrast to claimed apparatus of claim 1, newly cited Nakano does not disclose the claimed feature that each elastic force applied to each of the sheet transport guides is different from each other with distance from a predetermined reference position.

Independent claim 1 is submitted to be allowable over the combination of the "780" publication and Nakano for at least this reason.

Dependent claims 12-13 are allowable for the reasons set forth above with regards to claim 1 at least based on their dependency on claim 1.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 1 under 35 U.S.C. § 103(a).

Reconsideration and allowance of claims 1 and 12-13 are respectfully requested for at least these reasons.

New claims 14-15 have been added. Applicants submit that the claimed apparatus of independent claim 14 is allowable over the cited prior art. New dependent claim 15 is allowable at least based on its dependency to claim 14.

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**Conclusion**

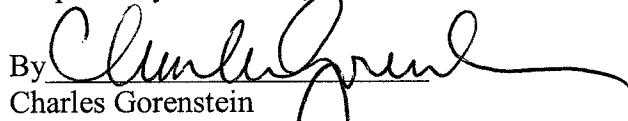
Therefore, for at least these reasons, claims 1 and 12-15 are believed to be distinguishable over the combination of the 780 publication and Nakano, individually or in any combination. In view of the above amendments and remarks, it is believed that the pending application is in condition for allowance. Applicants respectfully request that the pending application be allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Aslan Ettehadieh Reg. No. 62,278 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

Dated: March 5, 2009

Respectfully submitted,

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